

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-16. Canceled
17. (New) A tribometer comprising:
- a first support assembly configured to receive a central test piece, which test piece is circularly cylindrical, and to drive it in rotation about its axis; and
 - a second support assembly configured to receive three peripheral test pieces and to enable said central test piece to come simultaneously into contact with said three peripheral test pieces in an isostatic configuration, such that while being driven in rotation the central test piece can rub against the peripheral test pieces, the second support assembly comprising three support parts each carrying a respective peripheral test piece, each of these three support parts being movable relative to the other two.
18. (New) A tribometer according to claim 17, wherein at least one of the three peripheral test pieces, presents a shape selected in such a manner as to enable contact with the central test piece to be linear.
19. (New) A device according to claim 17, wherein at least one of the three peripheral test pieces and in particular all three of them, comprises a plane face whereby it rubs against the central test piece.
20. (New) A tribometer according to claim 19, wherein at least one of the three peripheral test pieces, and in particular all three of them, presents the form of a plate.
21. (New) A tribometer according to claim 17, wherein the second support assembly is configured in such a manner that the contacts between the peripheral test pieces and the central test piece are distributed at equal angles around said central test piece.
22. (New) A tribometer according to claim 17, wherein the three support parts are configured to form a cavity suitable for containing a fluid, in particular a lubricant, the central and peripheral test pieces extending at least in part in said cavity such that the contacts between the central test piece and the peripheral test pieces are immersed at least in part in the fluid.

23. (New) A tribometer according to claim 17, wherein it comprises a circuit configured to establish circulation of the fluid in the cavity.

24. (New) A tribometer according to claim 21, wherein it comprises a load-application device configured to apply a force on at least one of the support parts, and in particular on all three of them.

25. (New) A tribometer according to claim 17, wherein the load-application device comprises three pushers configured to exert on each of the respective support parts a force that is substantially normal to the axis of rotation of the central test piece, each pusher being driven by an actuator comprising a hinged arm secured at one end to a stationary portion of the tribometer, and at its other end to a moving drive member.

26. (New) A tribometer according to claim 25, wherein it comprises a load-sharing device for controlling the displacement of the drive members.

27. (New) A tribometer according to claim 26, wherein each drive member is secured to a drive pulley, and by the fact that the load-sharing device comprises a belt engaged on the three drive pulleys, the load-sharing device being configured to exert variable tension on the belt.

28. (New) A tribometer according to claim 27, wherein the load-sharing device comprises two guide pulleys for guiding the belt, each being disposed between two drive pulleys.

29. (New) A tribometer according to claim 27, wherein the load-sharing device comprises two load pulleys having the two ends of the belt secured respectively thereto.

30. (New) A tribometer according to claim 29, wherein at least one of the load pulleys is driven in rotation by a strip secured at one end to said load pulley and at its other end to a moving carriage.

31. (New) A tribometer according to claim 30, wherein the load-sharing device comprises a first membrane configured to drive displacement of the moving carriage.

32. (New) A tribometer according to claim 31, wherein it comprises a pressure-regulator system configured to control the pressure of the first membrane.

33. (New) A tribometer according to claim 18, wherein all three of the peripheral pieces present a shape selected in such a manner as to enable contact with the central test piece to be linear.

34. (New) A tribometer according to claim 18, wherein said linear contact is a straight line segment.

35. (New) A tribometer according to claim 32, wherein the system comprises a spring having a first end suitable for being moved by a motor and a second end secured to an arm configured to act on a second flexible membrane in communication with the first.